

Abstract

5 A method is provided for enhancing two-dimensional contrast and range images rendered from three-dimensional STIL data. A series of sequential steps are provided for each of the rendered contrast image data and rendered range image data. Briefly, the rendered contrast image data is scaled based on a mean intensity value of all pixels of data therein, stretched to a predetermined dynamic range, modified to compensate for jitter and CCD array effects associated with the STIL camera system, normalized using an exponential decay function that describes contrast intensity roll-off associated therewith, and has a histogram clip routine applied thereto. The rendered range image data is modified to compensate for jitter effects associated with the STIL camera system, has background portions of the resulting data modified to compensate for CCD array effects and range intensity roll-off associated with the STIL camera system, has a "salt and pepper" noise reduction routine applied thereto, and has a histogram clip routine applied thereto.